Filing Date: September 4, 2003

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A computerized medical diagnostic system, comprising:

a storage having a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

a storage having a script engine that operates on a computer and is configured to:

repetitively ask questions selected from the lists of questions to elicit responses, the responses establishing symptoms selected from the lists of symptoms, each established symptom contributing a weight to an accumulated total weight for a disease selected from the list of diseases, and

determine whether the accumulated total weight for the selected disease reaches or passes a threshold so as to declare a diagnosis.

- 2. (Original) The system defined in Claim 1, wherein the symptom is established based on a presence or absence of one or more other symptoms.
- 3. (Original) The system defined in Claim 1, wherein a presence of a selected set of symptoms adds additional weight to the accumulated total weight of at least one of the diseases.
- 4. (Original) The system defined in Claim 1, wherein a symptom at a first selected time during operation of the diagnostic system is weighted differently than the symptom at a second selected time.
- 5. (Original) The system defined in Claim 1, wherein the weight of a symptom established at a first severity is different than the weight of the symptom established at a second severity.
- 6. (Original) The system defined in Claim 1, wherein a selected set of symptoms that occur in a specified sequence over time lends a different accumulated weight to the total weight than an accumulation of the individual weights of the selected set of symptoms that do not occur in the specified sequence.

Filing Date: September 4, 2003

7. (Original) The system defined in Claim 1, wherein a sequence of an onset or ending of a selected set of symptoms lends a different accumulated weight to the total weight than an accumulation of individual weights of the selected symptoms alone.

- 8. (Original) The system defined in Claim 1, wherein the disease is ruled-in for further diagnostic inquiry based on the accumulated total weight.
- 9. (Original) The system defined in Claim 1, wherein the disease is ruled-out for further diagnostic inquiry based on the accumulated total weight.
- 10. (Original) The system defined in Claim 1, wherein questions for diseases deemed urgent are asked before questions for non-urgent diseases.
- 11. (Original) The system defined in Claim 1, wherein the script engine is further configured to determine whether the accumulated total weight for a disease reaches or passes a rule-out threshold so as to eliminate a possible diagnosis.
- 12. (Original) The system defined in Claim 8, wherein a degree of certainty of ruling-in the disease is provided.
- 13. (Original) The system defined in Claim 9, wherein a degree of certainty of ruling-out the disease is provided.
- 14. (Original) The system defined in Claim 1, wherein a plurality of diagnoses, each diagnosis having a degree of certainty, are accumulated into a patient specific differential diagnosis list.
- 15. (Previously presented) The system defined in Claim 1, wherein the script engine is configured to repetitively ask questions selected from two or more lists of questions to elicit responses from a patient.

Filing Date: September 4, 2003

16. (Previously presented) A computerized medical diagnostic method, comprising:

providing a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

executing a script engine on a computer comprising:

repetitively asking questions selected from the lists of questions to elicit responses;

establishing symptoms selected from the lists of symptoms based on the responses;

contributing a weight to an accumulated total weight for a disease selected from the list of diseases based on each established symptom; and

determining whether the accumulated total weight for the selected disease reaches or passes a threshold so as to declare a diagnosis.

- 17. (Original) The method defined in Claim 16, wherein establishing symptoms is based on a presence or absence of one or more other symptoms.
- 18. (Original) The method defined in Claim 16, additionally comprising adding additional weight to the accumulated total weight of at least one of the diseases based on a presence of a selected set of symptoms.
- 19. (Original) The method defined in Claim 16, wherein contributing a weight comprises weighting a symptom at a first selected time during execution of the script engine differently than the symptom at a second selected time.
- 20. (Original) The method defined in Claim 16, wherein contributing a weight comprises weighting a symptom established at a first severity differently than the weight of the symptom established at a second severity.
- 21. (Original) The method defined in Claim 16, additionally comprising contributing an accumulated weight to the total weight for a selected set of symptoms that occur

Filing Date: September 4, 2003

in a specified sequence over time that is different than an accumulation of the individual weights of the selected set of symptoms that do not occur in the specified sequence.

- 22. (Original) The method defined in Claim 16, additionally comprising contributing an accumulated weight to the total weight for a sequence of an onset or ending of a selected set of symptoms that is different than an accumulation of individual weights of the selected symptoms alone.
- 23. (Original) The method defined in Claim 16, additionally comprising ruling-in the disease for further diagnostic inquiry based on the accumulated total weight.
- 24. (Original) The method defined in Claim 16, additionally comprising rulingout the disease for further diagnostic inquiry based on the accumulated total weight.
- 25. (Original) The method defined in Claim 16, wherein repetitively asking questions comprises asking questions for diseases deemed urgent before questions for non-urgent diseases.
- 26. (Original) The method defined in Claim 16, additionally comprising determining whether the accumulated total weight for a disease reaches or passes a rule-out threshold so as to eliminate a possible diagnosis.
- 27. (Original) The method defined in Claim 23, additionally comprising providing a degree of certainty of ruling-in the disease.
- 28. (Original) The method defined in Claim 24, additionally comprising providing a degree of certainty of ruling-out the disease.
- 29. (Original) The method defined in Claim 16, additionally comprising accumulating a plurality of diagnoses, each diagnosis having a degree of certainty, into a patient specific differential diagnosis list.

Application No.:

10/656,592

Filing Date:

September 4, 2003

30. (Original) The method defined in Claim 16, wherein repetitively asking questions to elicit responses comprises repetitively asking questions to elicit responses from a patient.

31. (Previously presented) A computer usable medium having computer readable program code embodied therein for performing a computerized process used in medical diagnosis, the computer readable code comprising instructions for:

providing a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

executing a script engine comprising:

repetitively asking questions selected from the lists of questions to elicit responses from a patient;

establishing symptoms selected from the lists of symptoms based on the responses;

contributing a weight to an accumulated total weight for a disease selected from the list of diseases based on each established symptom; and

determining whether the accumulated total weight for the selected disease reaches or passes a threshold so as to declare a diagnosis.

- 32. (Original) The computer usable medium of Claim 31, additionally comprising instructions for accumulating a plurality of diagnoses, each diagnosis having a degree of certainty, into a patient specific differential diagnosis list.
- 33. (Previously presented) A computerized medical diagnostic system, comprising:

a storage having a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

a storage having a script engine that operates on a computer and is configured to:

repetitively ask questions selected from the lists of questions to elicit responses from a patient, the responses establishing symptoms selected from the

Filing Date: September 4, 2003

lists of symptoms, each established symptom contributing a weight to an accumulated total weight for a disease selected from the list of diseases, and

determine whether the accumulated total weight for the selected disease reaches or passes a threshold so as to declare a diagnosis.

- 34. (Previously presented) The system defined in Claim 1, wherein at least a portion of the symptoms in the lists of symptoms are associated with a plurality of questions to be asked, and wherein weights are assigned to possible responses of the plurality of questions.
- 35. (Previously presented) The system defined in Claim 34, wherein after the plurality of questions are answered, a symptom score is totaled of the weights corresponding to the responses.
- 36. (Previously presented) The system defined in Claim 35, wherein the symptom score is compared to a threshold for the symptom, and the symptom is established if the symptom score reaches or passes the symptom threshold.
- 37. (Previously presented) The system defined in Claim 36, wherein the weight of the established symptom is associated with the symptom score.
- 38. (Previously presented) The system defined in Claim 34, wherein at least some of the weights assigned to the possible responses of the plurality of questions have different values.
- 39. (Previously presented) The system defined in Claim 1, wherein the weight contributed by an established symptom is a negative integer.
- 40. (Previously presented) The method defined in Claim 16, wherein the weight contributed by an established symptom is a negative integer.

Application No.:

10/656,592

Filing Date:

September 4, 2003

41. (Previously presented) The computer usable medium defined in Claim 31, wherein the weight contributed by an established symptom is a negative integer.

- 42. (Previously presented) The system defined in Claim 33, wherein the weight contributed by an established symptom is a negative integer.
- 43. (Previously presented) The system defined in Claim 1, wherein the storage having the list of diseases and the storage having the script engine are the same device.
- 44. (Previously presented) The system defined in Claim 33, wherein the storage having the list of diseases and the storage having the script engine are the same device.